



State of Washington  
DRAFT  
REPORT OF EXAMINATION  
FOR WATER RIGHT APPLICATION

<b>PRIORITY DATE</b> 4/18/2013	<b>WATER RIGHT NUMBER</b> G4-35615
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<b>MAILING ADDRESS</b> ROBERT & ANNE MODARELLI 1231 N SUNSET DR TACOMA WA 98406	<b>SITE ADDRESS (IF DIFFERENT)</b>  UNKNOWN
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**Quantity Authorized for Withdrawal or Diversion**

<b>WITHDRAWAL OR DIVERSION RATE</b> 4.48	<b>UNITS</b> GPM	<b>ANNUAL QUANTITY (AF/YR)</b> 0.414
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**Purpose**

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Domestic Single	4.48		GPM	0.392		01/01 - 12/31
Irrigation		4.48	GPM	0.022		06/01 - 09/30

**REMARKS**

The combined instantaneous quantity from the well identified by Ecology's unique Well Tag # APG-192 shall not exceed 33 gallons per minute (gpm) between 8 total connections.

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	CONNECTIONS
0.11	0	(AC325) Carmel Views	8

**Source Location**

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
KITTITAS	GROUNDWATER		39-UPPER YAKIMA

SOURCE FACILITY/DEVICE	PARCELS	WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
1 Well	953358 & 953359	APG-192	19N	15E	07	SENE	47.15623	-121.01041
Datum: NAD83/WGS84								



**Place of Use (See Attached Map)****PARCELS (NOT LISTED FOR SERVICE AREAS)**

953364

**LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE**

Lot 7 of CARMEL VIEWS PLAT, in the county of Kittitas, State of Washington, as per plat thereof recorded in Book 11 of Plats, pages 24 and 25, records of said County.

**Proposed Works**

The subject well was drilled in 2006 (Ecology unique well ID # APG-192) to a depth of 124 feet with a 6-inch casing. A 3-horsepower (HP) submersible pump is installed in the well. The water system uses 2-inch Schedule 40 PVC outgoing pipes, attached to 20-foot stick length pipes with glued joints with 2-inch ball valves. Water from this well will be used for indoor domestic and outdoor supply. With the addition of this proposal, water from this well will be used for multiple domestic and incidental irrigation supplies totaling 8 connections and serving approximately 20 residents. Other connections to this system will be located on Parcel Nos. 953364, 953358, 953359, 953360, 953361, 953362, 953360, and 953363.

Carmel Views is a Department of Health (DOH) approved Group B community, private water system and will be regulated by DOH. Domestic wastewater will be discharged to an individual on-site septic system, pursuant to the *Declaration of Covenant* signed April 4, 2013, by the applicant.

**Development Schedule**

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Begun	July 31, 2034	July 31, 2036

In determining the timeframe of the above Development Schedule, that is the amount of time for the applicant to implement the authorized use of water, a reasonable and just time was considered and allowed under the existing conditions to complete construction of the project. Sufficient time was also awarded in order for the applicant to collect water-use data and to put the water to full beneficial use. The Development Schedule reflects consideration of the cost and magnitude of the project and the potential engineering and physical features typically to be encountered.

**Measurement of Water Use**

How often must water use be measured?	Monthly
How often must water use data be reported to Ecology?	Annually (Jan 31)
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Withdrawal (gpm or cfs)

**Provisions****A. Wells, Well Logs and Well Construction Standards**

1. The subject well and the right to use water from it are restricted to and authorized for the Spex Arth Creek alluvial sediment aquifer.



2. All wells constructed in the state shall meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction." Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard, shall be decommissioned.
3. All wells shall be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag shall remain attached to the well. If you are required to submit water measuring reports, reference this tag number.
4. Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.

**B. Measurements, Monitoring, Metering and Reporting**

1. An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use," WAC 173-173.
2. Water use data shall be recorded **monthly** and maintained by the property owner for a minimum of five years. The maximum rate of withdrawal and the annual total volume shall be submitted to the Department of Ecology by January 31<sup>st</sup> of each calendar year.
3. Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Central Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Central Regional Office for forms to submit your water use data.
4. WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

**C. Water Level Measurements**

1. In order to maintain a sustainable supply of water and ensure that your water source is not impaired by future withdrawals, static water levels **should** be measured and recorded monthly using a consistent methodology. Static water level is defined as the water level in a well when no pumping is occurring and the water level has fully recovered from previous pumping. Static water level data **should** include the following elements:
  - Unique Well ID Number.
  - Measurement date and time.
  - Measurement method (air line, electric tape, pressure transducer, etc.).
  - Measurement accuracy (to nearest foot, tenth of foot, etc.).
  - Description of the measuring point (top of casing, sounding tube, etc.).



- Measuring point elevation above or below land surface to the nearest 0.1 foot.
- Land surface elevation at the well head to the nearest foot.
- Static water level below measuring point to the nearest 0.1 foot.

**D. Department of Health Requirements**

1. Prior to any new construction or alterations of a public water supply system, the State Board of Health rules require public water supply owners to obtain written approval from the Office of Drinking Water of the Washington State Department of Health. Please contact the Office of Drinking Water prior to beginning (or modifying) your project at DOH/Division of Environmental Health, 16201 E. Indiana Avenue, Suite 1500, Spokane Valley, WA 99216, (509) 329-2100.

**E. Easement and Right-of-Way**

1. The water source and/or water transmission facilities are not wholly located upon land owned by the applicant. Issuance of a water right authorization by this department does not convey a right of access to, or other right to use, land which the applicant does not legally possess. Obtaining such a right is a private matter between applicant and owner of that land.

**F. Water Use Efficiency**

1. The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

**G. Proof of Appropriation**

1. Final beneficial use calculations for each connection to the Carmel Views water system, either independently or combined, shall be determined during the investigation at the Proof of Appropriation stage.
2. The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the permit. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

**H. Schedule and Inspections**

1. Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

**I. General Conditions**

1. You (applicant) will pay to Ecology the sum of \$57.02, which represents a proportionate amount of the payment due and owing to the United States for storage and delivery of water under Paragraph 15(a) of *Water Storage and Exchange Contract No. 09XX101700*, between the Bureau of Reclamation and the State of Washington Department of Ecology, Yakima Project,



Washington, dated January 29, 2009.<sup>1</sup> The consumptive use of 0.072 acre-feet from September 1 through March 31 is subject to the terms and conditions in the *Water Storage and Exchange Contract No 09XX101700*.

2. You (applicant) will record with the Kittitas County Auditor a property covenant as required under WAC 173-539A-050 that restricts or prohibits trees or shrubs over a septic drain field on Parcel No. 953364.
3. You (applicant) will record with the Kittitas County Auditor an appropriate conveyance instrument under which the applicant obtains an interest in Trust Water Right No. CS4-05259CTCL@2sb7 to offset consumptive use.
4. Any valid priority calls against the source Trust Water Right No. CS4-05259CTCL@2sb7, based on local limitations in water availability, will result in temporary curtailment of the use of water under the permit until the priority call for water ends.

#### Findings of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. G4-35615, subject to existing rights and the provisions specified above.

#### Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

<sup>1</sup> "Long-Term Water Storage and Exchange Agreement between the U.S. and the State of Washington, Department of Ecology" (Contract No. 09XX101700),

[http://www.ecy.wa.gov/programs/wr/cro/images/pdfs/exchangecontract\\_012909.pdf](http://www.ecy.wa.gov/programs/wr/cro/images/pdfs/exchangecontract_012909.pdf), accessed on May 13, 2013.



Street Addresses	Mailing Addresses
<b>Department of Ecology</b> Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503  <b>Pollution Control Hearings Board</b> 1111 Israel RD SW Ste 301 Tumwater, WA 98501	<b>Department of Ecology</b> Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608  <b>Pollution Control Hearings Board</b> PO Box 40903 Olympia, WA 98504-0903

Signed at Yakima, Washington, this \_\_\_\_ day of \_\_\_\_ 2013.

\_\_\_\_\_  
 Mark Kemner, LHG, Section Manager

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.

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## BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number G4-35615.

### *Priority Processing*

This application is being priority processed because it qualified under the criteria under which an application may be processed prior to competing applications (WAC 173-152).

**Table 1:** Summary of "Requested" Water Right

<b>Applicant Name</b>	Robert & Anne Modarelli
<b>Date of Application</b>	4/18/2013
<b>Place of Use</b>	Lot 7 of CARMEL VIEWS PLAT, in the county of Kittitas, State of Washington, as per plat thereof recorded in Book 11 of Plats, pages 24 and 25, records of said County. (Parcel No. 953364.)

<b>County</b>	<b>Waterbody</b>	<b>Tributary To</b>	<b>WRIA</b>
Kittitas	Groundwater		39-Upper Yakima

<b>Purpose</b>	<b>Rate</b>	<b>Unit</b>	<b>Ac-ft/yr</b>	<b>Begin Season</b>	<b>End Season</b>
Domestic Single	33	GPD	0.392	01/01	12/31
Irrigation	33	GPD	0.022	04/01	10/31

<b>Source Name</b>	<b>Parcels</b>	<b>Well Tag</b>	<b>Twp</b>	<b>Rng</b>	<b>Sec</b>	<b>QQ Q</b>	<b>Latitude</b>	<b>Longitude</b>
1 Well	953358 & 953359	APG-192	19N	15E	07	SENE	N/A	N/A

CFE = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum: NAD83/WGS84.

On May 21, 2013, the applicant's representative amended the original application to correct the intended water duty. The corrected parameter follows:

**Table 2:** Summary of "Amended-Requested" Water Right

<b>Date of Amendment</b>	5/21/2013
<b>Amended Water Duty</b>	From 33 gallons per day (gpd) to 33 gallons per minute (gpm).

### Legal Requirements for Approval of Appropriation of Water

RCWs 90.03 and 90.44 authorize the appropriation of public water for beneficial use and describe the process for obtaining water rights. Laws governing the water right permitting process are contained in RCW 90.03.250 through 90.03.340 and RCW 90.44.050. In accordance with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for water rights to be approved:

- Water must be available.
- There must be no impairment of existing rights.



- The water use must be beneficial.
- The water use must not be detrimental to the public interest.

#### *Public Notice*

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted, and used. Notice of this application was published in The Daily Record of Ellensburg, Washington on May 14 and 21, 2013. No comments or protests were received by Ecology during the 30-day comment period.

#### *Consultation with the Department of Fish and Wildlife*

The Department must give notice to the Department of Fish and Wildlife of applications to divert, withdraw or store water. Notice was officially provided on July 8, 2013, during a Yakima Water Transfer Working Group (WTWG) meeting. A positive response was communicated in response to this proposal.

#### *State Environmental Policy Act (SEPA)*

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions is met:

- It is a surface water right application for more than 1 cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies.
- It is a groundwater right application for more than 2,250 gallons per minute.
- It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above.
- It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).
- It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application does not meet any of these conditions for Water Resources, it is categorically exempt from SEPA and a threshold determination is not required.

## **INVESTIGATION**

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#### *Site Visit*

A site visit was performed by Ecology employees Candis Graff and Anna Hoselton on June 7, 2011, for a previous application proposing to use the same source. Global Positioning Satellite (GPS) coordinates were taken of the location of the well head. Using 2011 National Agricultural Imaging Program (NAIP) aerial photography and ArcGIS10 computer software, Ecology later determined that the GPS coordinates placed the well approximately 45 feet too far to the east. Although the coordinates are still within the acceptable range of error in location accuracy for the GPS hand-held unit, Ecology used the best available science of aerial photography, coupled with the recall of the site visit and ground-truthing to accomplish a more precise mapping of the location of the well.



## Proposed Use and Basis of Water Demand

The DOH-approved Group B water system, Carmel Views, became effective on May 5, 2009, and is approved for eight connections with the residential population estimated at 20. The source, however, is not currently metered, which will be required by Ecology.

The December 2009, Water System Design Manual<sup>2</sup> (WSDM) by DOH contains guidance for establishing water demands. The suggested methods, in order of preference, include:

1. Metered water production and use records.
2. Comparable metered water production and use data from analogous water systems. See WAC 246-290-221(3)(a) and Section 5.2.3.
3. The criteria presented in Chapter 5.

According to the WSDM, new systems or existing water systems that have no source meter records, information can be obtained from analogous water systems or from information presented in Appendix D in order to estimate the Average Daily Demand (ADD) and Maximum Daily Demand (MDD) for residential connections (WAC 246-290-221(3)).<sup>3</sup> Analogous water systems are defined in Section 5.2.3 of the WSDM as systems with similar characteristics, such as, but not limited to: demographics, housing size, lot sizes, climate, conservation practices, use restrictions, soils and landscaping, and maintenance practices. As such, a reasonable level for a MDD for internal uses can be established at 350 gallons per day (GPD)/Equivalent Residential Unit (ERU).

The MDD values are set at 350 gpd/ERU, which is consistent with the WSDM. Under WAC 173-539A, 30% of domestic in-house use on a septic system is assumed to be consumptively used and 90% of outdoor domestic use is assumed to be consumptive.

Monthly and annual use at full build out of the project were calculated based on the proposed 1 ERU, DOH's MDD, Ecology's Guidance Document 1210 entitled, Determining Irrigation Efficiency and Consumptive Use, the Washington Irrigation Guide (WIG) for outdoor water use, and the assumptions found in WAC 173-539A. A crop irrigation requirement (CIR) for grass in the Cle Elum area of 18.11 inches was estimated using the WIG. Assuming the outdoor use is 90% consumptive, consistent with WAC 173-539A, and applying the WIGs CIR, the outdoor water requirement for 500 square feet (0.011 acre) of grass is 0.019 ac-ft/yr. The calculated consumptive use and total water-use calculations considered factors specified in WAC 173-539A and are summarized in **Table 3** and **Table 4** below.

<sup>2</sup> Department of Health, "Water System Design Manual," Olympia, Wa., 2009, pp. 27-32, [www.doh.wa.gov/chp/dw/Publications/331-123.pdf](http://www.doh.wa.gov/chp/dw/Publications/331-123.pdf), accessed on May 30, 2013.

<sup>3</sup> Ibid, p. 28.



**Table 3: \*Estimated Total and Consumptive Use**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Use (ac-ft)	.033	.030	.033	.032	.033	.036	.041	.039	.036	.033	.032	.033	.414
Total Consumptive (ac-ft)	.010	.009	.010	.010	.010	.013	.017	.015	.013	.010	.010	.010	.137

\*Quantities are rounded.

**Table 4: \*Estimated Indoor/Outdoor Water Use**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Indoor (gpd)	350	350	350	350	350	350	350	350	350	350	350	350
Outdoor (gpd)	0	0	0	0	0	43	82	60	45	0	0	0
<b>Total (gpd)</b>	350	350	350	350	350	393	432	410	395	350	350	350

\*Quantities are rounded.

#### Other Rights Appurtenant to the Place of Use

**Table 5: Other Right Appurtenant to POU**

Control Number	Doc. Type	Purpose	Qa	Source
S4-84638-J	CFO	SR	166,846	Yakima River
S4-84639-J	CFO	SR	250,261	Kachees River
S4-84640-J	CFO	SR	446,610	Yakima River
S4-84641-J	CFO	SR	38,768	Bumping River
S4-84642-J	CFO	SR	216,850	Tieton River
S4-84643-J	CFO	SR	5,300	Tieton River
S4-84644-J	CFO	SR	472	Yakima River
S4-84645-J	CFO	SR	2	Tieton River
S4-84646-J	CFO	SR	56	Yakima River
S4-84647-J	CFO	SR	60	Yakima River
S4-84648-J	CFO	SR	408	Yakima River
S4-84649-J	CFO	SR	1,265	Tieton River
S4-84650-J	CFO	SR	5,120	Yakima River

DG=Domestic General, SR=Storage

Surface Water Right Nos. S4-84638-J through S4-84650-J, which are owned by the United States Bureau of Reclamation, authorize water to be stored for flood control purposes.

No other surface water rights from Spex Arth Creek within a 0.5-mile radius were confirmed by the adjudication court. Other ground water rights in the vicinity are summarized in **Table 6** below.



**Table 6: Ground Water Rights within .5-Mile Radius of POW**

<b>Control Number</b>	<b>Document Type</b>	<b>Authorized/Claimed Annual Quantity (Qa)</b>	<b>Purpose</b>	<b>Source</b>
G4-108735CL	Claim <sup>4</sup>	Not Specified	DG, IR, ST	1 Well
G4-053368CL	Claim	Not Specified	DG	1 Well
G4-35435	WBN/Application	0.609 ac-ft/yr	DS, IR	1 Well
G4-35250P	Permit	21.9 ac-ft/yr	DM, IR	4 Wells
G4-35460P	Permit	0.414	DS, IR	1 Well
G4-35495P	Permit	0.414	DS, IR	1 Well
G4-35526P	Permit	1.24	DM, IR	1 Well
G4-35539P	Permit	0.414	DS, IR	1 Well
G4-35540P	Permit	0.414	DS, IR	1 Well
G4-35556P	Permit	0.414	DS, IR	1 Well
G4-35577P	Permit	1.590	DM, IR	1 Well
G4-28206CWRIS	Certificate	1.0 ac-ft/yr	DS	1 Well

Definitions: WBN=Water budget Neutral, DM=Domestic Multiple, DS=Domestic Single, IR=Irrigation, DG=Domestic General, and ST=Stock water

G4-108735CL and G4-053368CL are short-form claims and represent permit-exempt groundwater uses.

WBN Application No. G4-35435 requests withdrawal from an undrilled well for domestic supply to serve one residence and incidental irrigation. This proposal has not been processed.

Permit Nos. G4-35250P, G4-35460P, and G4-35495P, together authorize multiple supplies for up to 80 connections total between the four permits along with approximately 5+acres of irrigation.

Permit Nos. G4-35556, G4-35540, and G4-35526 authorize this use for domestic and lawn and garden and will use the same source as the proposed source for this application.

Permit Nos. G4-35539P and G4-35577P request water from the same well for single and multiple domestic and incidental lawn and garden irrigation.

G4-2806CWRIS authorizes single domestic supply seasonally from March 1 through October 31.

<sup>4</sup> The above referenced claims were filed under Claims Registration Act, RCW 90.14. The intent of this act was to document those uses of surface water in existence prior to the adoption of the State Surface Water Code, RCW 90.03, which was adopted in 1917, and those uses of ground water in existence prior to the adoption of the State Ground Water Code, RCW 90.44, which was adopted in 1945. Since each code adoption, the only means of acquiring a water right within the state is by filing for, and receiving, a permit from Ecology or one of its predecessors or by establishing a right under the "exemption" under the Ground Water Code RCW 90.44.050. Ecology recognizes that the final determination of the validity and extent associated with a claim registered in accordance with RCW 90.14 ultimately lies with the Superior Court through the general adjudication process provided for by RCWs 90.03.110 through 90.03.240. Ecology does, however, recognize that water use may be occurring under these claims.



## Impairment Considerations

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection. A water right application may not be approved if it would:

- Interrupt or interfere with the availability of water to an adequately constructed groundwater withdrawal facility of an existing right. An adequately constructed groundwater withdrawal facility is one that (a) is constructed in compliance with well construction requirements and (b) fully penetrates the saturated zone of an aquifer or withdraws water from a reasonable and feasible pumping lift.
- Interrupt or interfere with the availability of water at the authorized point of diversion of a surface water right. A surface water right conditioned with instream flows may be impaired if a proposed use or change would cause the flow of the stream to fall to or below the instream flow more frequently or for a longer duration than was previously the case.
- Interrupt or interfere with the flow of water allocated by rule, water rights, or court decree to instream flows.
- Degrade the water quality of the source to the point that the water is unsuitable for beneficial use by existing users (e.g., via sea water intrusion).

## Water Availability

For water to be available for appropriation, it must be both physically and legally available.

### *Physical Availability*

For water to be physically available for appropriation there must be ground or surface water present in quantities and quality and on a sufficiently frequent basis to provide a reasonably reliable source for the requested beneficial use or uses. In addition, the following factors are considered:

- Volume of water represented by senior water rights, including federal or tribal reserved rights or claims.
- Water right claims registered under Chapter 90.14 RCW.
- Ground water uses established in accordance with Chapter 90.44 RCW, including those that are exempt from the requirement to obtain a permit.
- Potential riparian water rights, including non-diversionary stock water.
- Lack of data indicating water usage can also be a consideration in determining water availability, if the department cannot ascertain the extent to which existing rights are consistently utilized and cannot affirmatively find that water is available for further appropriation.

When considering applications for new groundwater right permits, Ecology has a statutory directive to limit appropriations of groundwater to amounts that will maintain and provide a safe sustaining yield to prior appropriations and to avoid aquifer overdraft (RCW 90.44.130, PCHB No. 94-114). Given the hydraulic relationship described below and the acquisition of a portion of Trust Water Right No. CS4-05259CTCL@2sb7, this directive will be satisfied.



## Hydrologic/Hydrogeologic Evaluation

The following hydrologic/hydrogeologic technical excerpts were written and prepared and stamped by licensed hydrogeologist, Anna Hoselton, and seeks to address, by way of discussion, analysis, and evaluation, potential for impairment to existing water users. The entire Technical Memorandum can be reviewed upon request.

### ***Hydrogeologic Setting***

#### ***Project Area Geologic/Hydrogeology***

An analysis for well APG192 was previously evaluated in the June 21<sup>st</sup>, 2011, Technical Memorandum written for permit file G4-35460 for Oren Development LLC. Permitting conclusions found in the previous evaluation are directly applicable to the current application seeking to use well APG192 and are summarized below to include the current application. Note: A copy of the June 21<sup>st</sup>, 2011, Technical Memorandum written for permit file G4-35460 for Oren Development LLC and discussing Well APG192 should be included in the files for Applicants Robert and Anne Modarelli in file No. G4-35615.

#### ***Water Availability***

Based on area topography, groundwater levels and flow direction calculations, groundwater captured by the subject well is most likely to reduce the Sub Surface Run Off (SSRO). Based on the hydrogeologic setting, well data, and the simplified water balance, groundwater is physically available for the project. Water availability, however, also includes policy, management and legal considerations and is ultimately a permitting/management decision that is, in part, based on the above information.

#### ***Impairment***

The additional withdrawal of 0.414 af/yr at existing well APG192 for application No. G4-35615 will result in some minor additional drawdown in the vicinity of the well, but is not anticipated to result in impairing effects on existing rights.

#### ***Legal Availability***

To determine whether water to be legally available for appropriation, the following factors are considered:

- Regional water management plans – which may specifically close certain water bodies to further appropriation.
- Existing rights – which may already appropriate physically available water.
- Fisheries and other instream uses (e.g., recreation and navigation). Instream needs, including instream and base flows set by regulation. Water is not available for out of stream uses where further reducing the flow level of surface water would be detrimental to existing fishery resources.
- The Department may deny an application for a new appropriation in a drainage where adjudicated rights exceed the average low flow supply, even if the prior rights are not presently being exercised. Water would not become available for appropriation until existing rights are relinquished for non-use by state proceedings.



When evaluating legal availability regarding applications for new groundwater permits, Ecology must statutorily limit appropriations of groundwater to:

1. Uses for a structure for which a building permit is granted and the building permit application vested prior to July 6, 2009.
2. Uses determined to be water-budget-neutral pursuant to WAC 173-539A-050.

Given that this proposal has acquired a portion of Trust Water Right No. CS4-05259CTCL@2sb7 in the amount of 0.161 acre-feet, this directive will be met. This trust water right is dedicated to in-stream flows for water banking mitigation purposes for as long as the right remains in the TWRP. Such trust water right has an equal or greater contribution to flows during irrigation season as measured on the Yakima River at Parker that would serve to mitigate the proposed use for impacts to total water supply available.

### Beneficial Use

The proposed uses of water are defined in statute as beneficial uses (RCW 90.54.020(1)).

### Public Interest Considerations

When investigating a water right application, Ecology is required to consider whether the proposal is detrimental to the public interest. Ecology must consider how the proposal will affect an array of factors, such as wildlife habitat, recreation, water quality, and human health. The environmental resources and other natural values associated with the area were taken into account during the consideration of this proposal.

### *Consideration of Protests and Comments*

No protests were filed against this application.

### Conclusions

In conclusion,

- Water is physically available at the quantities sufficient to meet project demand. When combined with the proposed mitigation measures, water is legally available under the provisions of WAC 173-539A.
- RCW 90.54.020 recognizes single domestic use and irrigation as beneficial uses of water.
- Approval of the proposed appropriation will not result in impairment of existing water rights.
- Approval of the proposed appropriation is not detrimental to the public interest.

### RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved in the amounts and within the limitations listed below and subject to the provisions listed above



## Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial.

- 4.48 gallons per minute (gpm), up to 33 gpm for 8 total connections.
- 0.414 acre-feet per year.
- Continuous, year-round, indoor, single domestic supply.
- Seasonal (June 1 through September 30 annually) irrigation of up to 500 square feet of lawn and garden.

### *Point of Withdrawal*

One well (APG-192) approximately 1040 feet west and 1805 feet south from the northeast corner of Section 7, Township 19 North, Range 15 E.W.M.

### *Place of Use*

As described on Page 2 of this Report of Examination.

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*Report Writer*

*Date*

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